

Claims

1. An electrical component comprising:
a substrate circuit board;
an electronic device mounted on the substrate circuit board in spaced relationship from the substrate circuit board; and
a composite material underfilling, overmolding or encapsulating the electronic device, the composite material including a continuous thermoset matrix phase and a discontinuous liquid crystalline polymer phase dispersed throughout the thermoset matrix phase.
2. The electrical component of claim 1, wherein the electronic device is an integrated circuit device.
3. The electrical component of claim 1, wherein the thermoset material is the cured product of a liquid epoxy resin system.
4. The electrical component of claim 1, wherein the liquid crystalline polymer is hydroxyethyl cellulose acetate.
5. The electrical component of claim 1, wherein the dispersed liquid crystalline polymer is in the form of particles having an average size of from about 0.2 microns to about 0.5 microns.
6. The electrical component of claim 1, wherein the dispersed liquid crystalline polymer is present in the composite material in an amount of about 10 percent by weight.